

and the American Ambassador in Constantinople had been secured. The ladies have evidently now had an offer of the safe conduct, and have pluckily decided to remain in Nazareth and do what they can to alleviate the sufferings of the invalid Turkish soldiers in the hospital.

Correspondence.

CARBOLIC ACID IN THE IMMEDIATE TREATMENT OF WOUNDS.

SIR,—In the very interesting account of the medical arrangements of the British Expeditionary Force, by "a special correspondent in Northern France," in the *BRITISH MEDICAL JOURNAL*, February 13th, reference is made to the use of liquid carbolic acid in the treatment of wounds in the present war. The writer states: "The medical authorities in France determined to have carbolic acid tried upon lines calculated to test thoroughly the statements made in respect of it." He then goes on to describe how "one of the consulting surgeons was asked to select fifty cases on their arrival at the clearing hospitals, and to cause their wounds to be submitted, under his own supervision, to a careful process of disinfection in the fashion prescribed by the advocates of carbolic acid treatment." I submit that this statement at once vitiates the whole of the alleged "test." The whole point about the use of pure carbolic acid is that it is intended as a prophylactic against sepsis and tetanus, and it should, therefore, be applied immediately after infliction of the wound, and in my recent letters on this subject in the *BRITISH MEDICAL JOURNAL*, I specially emphasized the importance of supplying each man at the front with a means of immediately disinfecting his own or his neighbour's wound with this most reliable antiseptic. To allow many hours to elapse until the wounded man reaches the clearing hospital, and even then to make him wait his turn for the application to be made "under the eye of the consulting surgeon," is to lose the golden opportunity for prophylaxis. I understand that in the course of two hours, under existing conditions, many of the wounds have already become septic. Prevention is then out of the question. As well might we talk about preventing a war when war is ablaze.

I fully admit that in the exigencies of war it may not always be possible to carry out prophylaxis, but at any rate I think our men should be provided with the means and the knowledge of applying such measures whenever possible. At present we do not know the exact time after the infliction of a wound during which prophylaxis is possible; probably under existing conditions it is less than half an hour. But once infection has obtained a footing and penetrated into the deeper tissues and lymphatics, obviously merely smearing the surface with phenol (or any other antiseptic) will not undo the mischief done. Most of the advocates of pure carbolic have strongly deprecated its use once the wound has become septic. I do not at present purpose discussing the treatment of septic wounds. But presumably every one will agree in regard to sepsis that "prevention is better than cure," the practical question being, Is prevention possible and what are the best means at present available? Personally, I still believe pure carbolic acid to be the most reliable antiseptic we have for this purpose, but it is essential it should be applied immediately—that is, before any germ growth or absorption. So far, despite your correspondent's remarks, phenol has evidently not been given a proper trial as a preventive of sepsis and tetanus, although it is nearly three months since I first suggested a handy form of carbolic swab for inclusion in the first field dressing; indeed, my offer to send a supply of these swabs for trial by the men at the front is still unaccepted. It is only by supplying each individual soldier on the battlefield with such a means of disinfecting his own or his neighbour's wound immediately after infliction and impressing upon him the urgent importance of such measures and the need for thoroughness in their application (just as he should be taught the necessity of promptly arresting haemorrhage and the best methods of doing so) that any likelihood of success in the prophylaxis of wound infection will be attained.—I am, etc.,

P. R. COOPER, M.D., B.Sc.Lond., F.R.C.S.Eng.
Bowden, Feb. 13th.

ETHER AS A DISINFECTANT.

SIR,—During the past two years I have been using ether as an antiseptic in the North Lonsdale Hospital in cases of compound fractures and dislocations. The wounds were thoroughly swabbed out with ether, and afterwards with tincture of iodine, or 3 per cent. iodine in chloroform. Probably, as Mr. Waterhouse states in his article (February 6th), the use of iodine solution was superfluous. On several occasions, even when the wounds were obviously contaminated, it was found that it was safe to close up the wound, with the result that the cases were practically converted into simple ones, and progressed accordingly.

For this method to be successful I think it is essential that no watery solutions should be used beforehand.—I am, etc.,

Barrow, Feb. 13th.

JOHN LIVINGSTON, F.R.C.S. Edin.

SIR,—Apropos of Mr. Waterhouse's paper on ether as a disinfectant and prophylactic application, it may be of interest to recall the experiments I and Mr. Pakes, the then bacteriologist at Guy's Hospital, made on the contents of the ether bags of Clover's apparatus. There had been a death or two from ether pneumonia or bronchitis, and the usual remarks had been made to the effect that the pneumonia was the result of infection from the apparatus used. I got Mr. Pakes to make cultivations from the bag. In no case was any living organism found. On testing the face-pieces we discovered that, starting with a clean face-piece, the mere blowing through this by a healthy man caused it to be soiled by a multitude of various organisms. But an important point of great practical use was discovered in the course of our experiments. If the face-piece was well washed under a good stream of water at 120° F. for sixty seconds, the face-piece invariably remained sterile. This washing was always done by me under a tap supplied by the boilers of the hospital, and care was taken that every crevice of the face-piece was well flushed.—I am, etc.,

London, W., Feb. 6th.

F. WILLIAM COCK, M.D., F.S.A.

ALCOHOL AND DELIRIUM TREMENS.

SIR,—Before replying to Dr. Hare's criticisms in his letter to the *JOURNAL* of February 20th I would express to him my sincere wish that I had deserved the compliments he pays me, and had taken some part, however small, in assisting to his graduation the able author of the admirable work, *The Food Factor in Disease*. But I have never been an examiner at the university whose degree he holds.

I fully acknowledge the apparent but unintentional unfairness of my use of the words, "Dr. Hare *now admits*," and I greatly regret that, owing to my imperfect recollection of the previous correspondence, I did not write instead the words, "now explicitly states." In my letter which appeared in the *JOURNAL* of February 6th I mistook a passage seemingly quoted from Dr. Hare (in a letter signed "The Reviewer," which followed Dr. Hare's in the issue of January 30th) for a statement made by Dr. Hare himself. This passage, I find on reference, was an unequivocal statement that delirium tremens was always caused by cutting off alcohol; could always be aborted by giving it at an early stage; and that an attack could infallibly be produced in any one accustomed for long to large doses, by cutting off or materially diminishing the customary supply. I was thus led by mistaking the reference into suggesting that Dr. Hare had modified his position. Finding now that Dr. Hare never made any such statement himself, or any words with similar implication, I trust he will accept the substitution indicated above for the peccant words which should not have been written.

With respect to Dr. Hare's comments on my criticisms of his argument that *the necessary cause of delirium tremens is a large and sudden fall in the amount of circulating alcohol in one who has established a high degree of tolerance*, I think he has failed to see my point. I will, therefore, put it afresh, and perhaps more explicitly, as follows: Dr. Hare observes that a large number of patients who have been drinking heavily for long without necessarily getting grossly drunk or otherwise showing marked incapacities, are attacked with delirium tremens after a rapid or sudden stoppage of alcohol. He then conceives the hypothesis, or assumes, (a) that the rapid fall of